BP-8 Series

High Flow Back Pressure Regulators

Introduction

This series is designed to control back pressure at low to moderate pressure ranges with relatively high flow. While designed primarily for instrumentation systems and similar to the PR-7, the BP-8 is also suitable for pilot plant, research and development activities. Special diaphragm and spring combinations give the user a selection of pressure ranges that are near atmospheric. The glass filled PTFE / stainless seat assembly gives tight shut off even at lower flows for most applications.

The 316 stainless steel body assembly provides service for most chemical environments and brass models are available for those applications not requiring that type of corrosion resistance. If special requirements demand other materials of construction, please contact the factory.

pressure regulators

Typical Applications

- Instrumentation systems
- Pilot plants
- Air compressors

Technical Data

CONSTRUCTION	316L stainless steel or brass (standard) Monel® or Hastelloy® C-276 (optional)
ADJUSTABLE STANDARD PRESSURE RANGES	0–10, 0–25, 0–50, 0–100, 0–250, and 0–500 psig
OPERATING TEMPERATURE	–40° F to +250° F (–40° C to +121° C)
C_V COEFFICIENT	1.2 (standard) 0.40 and 0.70 (optional)
INLET & OUTLET CONNECTIONS	¼″ FNPT

Features & Benefits

- Pressure control of large flows
- Standard stainless steel diaphragm, PTFE faced

Options

- Panel mounting
- Extra ports
- ⅜″ FNPT, ½″ FNPT, ¼″ tube weld, ¼″ pipe weld, ½″ tube weld

High Flow Back Pressure Regulators

Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Viton®	250° F (121° C)	@	250 psig (1.72 MPa)
Glass filled PTFE	250° F (121° C)	@	500 psig (3.44 MPa)
PEEK™	500° F (260° C)	@	500 psig (3.44 MPa)

Temperatures in excess of 175° F (80° C) require the use of a T-handle or the tamper proof option.

To Order, contact your local Distributor Link below:
www.goreg.com/distributor/index.htm

Verify that your chosen part number is valid using the GO Wizards at
www.goreg.com/products/matrix/index.htm

How to Order

For additional configurations, consult the factory. **Standard items in bold.**

BP8 – 1 A 1 1 L 9 G 1 1 1 A

Body Material
- **1 316L stainless steel, stainless steel diaphragm**
- 2 Brass, stainless steel diaphragm
- **4** Monel®, Inconel® diaphragm
- **6** Hastelloy® C-276, Inconel® diaphragm
- C 316L stainless steel, Inconel® diaphragm

Port Configuration
- **A Standard (body "A")**

See pg. 28 for port locations.

Process Port Types
- **1 ¼˝ FNPT (¼˝ FNPT gauge ports)**
- **2** ¼˝ Tube stub, 2" long (¼˝ FNPT gauge ports)
- 3 ¼˝ Sch 80 pipe stub, 4" long (¼˝ FNPT fauge ports)
- **4** ⅜˝ FNPT (¼˝ FNPT gauge ports)
- 5 ½˝ FNPT (¼˝ FNPT gauge ports)
- 6 ½˝ Tube stub, 2" long (¼˝ FNPT gauge ports)
- K ¼˝ Sch 40 pipe stub, 4" long (¼˝ FNPT gauge ports)

Cavity Finish
- **1 < 25 Ra**

Actuator Material
- **D** Viton®
- **L Glass filled PTFE®**
- **Q PEEK™**

NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.goreg.com or contact the factory.

Options
- **A** EB33 (oxygen cleaning)
- **B** EB5 cleaning
- **D** Helium leak test
- **E** Pressure test certificate
- **F** Certificate of Conformity
- **G** CMTR

Cap Assembly
- **1 Standard, stainless steel**
- 2 T-handle, stainless steel
- 3 T-handle, panel mount, stainless steel
- **4** Panel mount, stainless steel
- 5 Captured vent, aluminum
- 6 Captured vent, panel mount, aluminum
- 7 Captured vent, stainless steel
- 8 Tamper-proof, stainless steel
- G Metal knob
- H ¼˝ NPT dome-loaded, stainless steel

Diaphragm Facing/Backing Material
- **1 PTFE / metal backing**
- 2 PTFE / Viton®
- 6 Tefzel ring / metal backing
- 0 PTFE / Hastelloy® C-276

Diaphragm Type
- **1 Standard diaphragm**

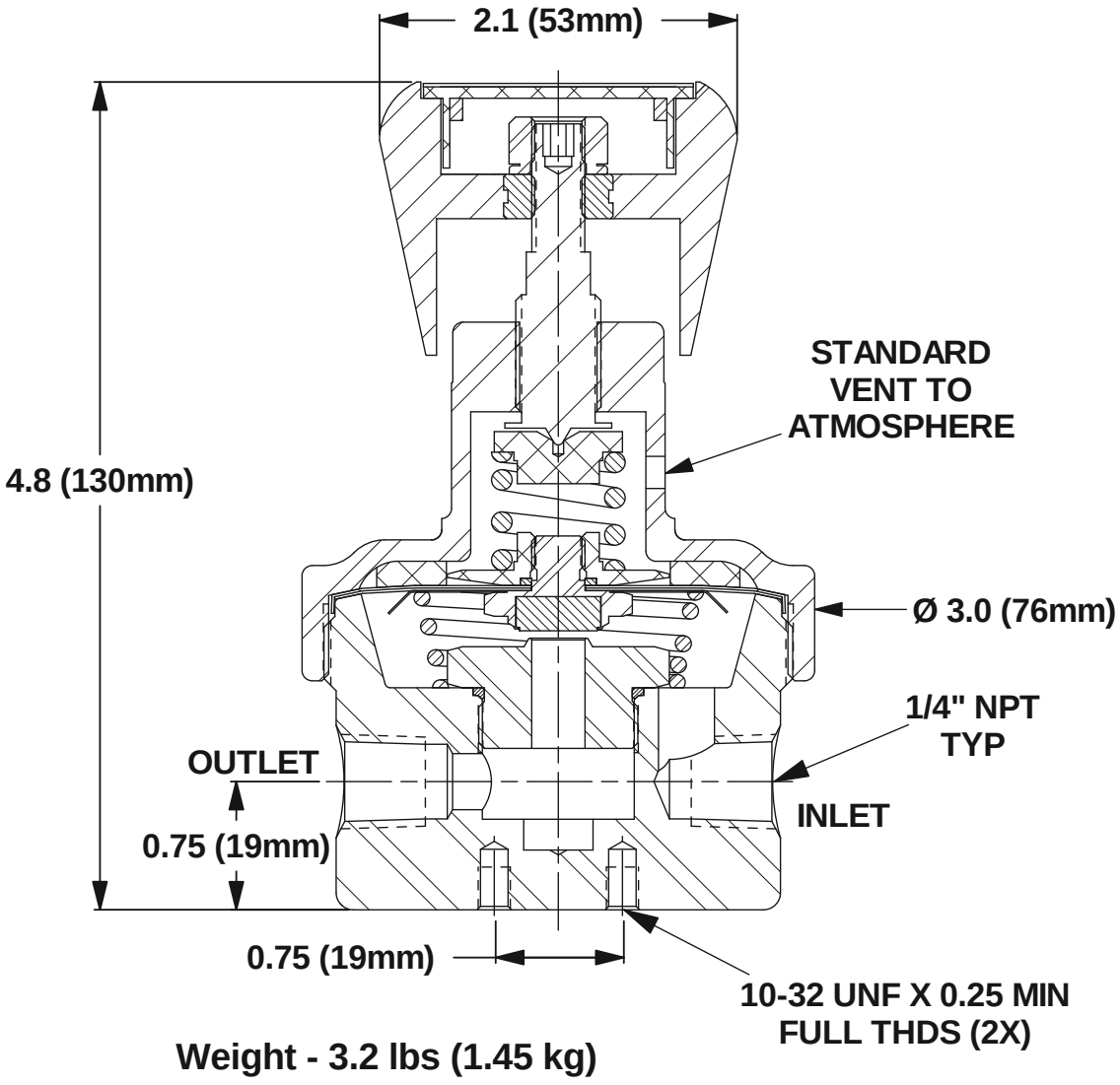
Control Range
- **C** 0–10 psig
- D 0–25 psig
- **E** 0–50 psig
- G 0–100 psig
- I 0–250 psig
- J 0–500 psig

Flow Coefficient (C_v)
- **9 1.2**
- **K** 0.7
- **L** 0.4

For flow curve charts, visit http://www.goreg.com.

High Flow Back Pressure Regulators

Outline and Mounting Dimensions



Weight - 3.2 lbs (1.45 kg)